```
=> d que 120
                                                   "GLUCOSAMINE SULFATE"/CN
                                          PLU=ON
              1 SEA FILE=REGISTRY ABB=ON
L1
            215 SEA FILE=REGISTRY ABB=ON
                                          PLU=ON
                                                   3416-24-8/CRN
L2
          22760 SEA FILE=REGISTRY ABB=ON
                                                   7664-93-9/CRN
                                          PLU=ON
L3
             21 SEA FILE=REGISTRY ABB=ON
                                          PLU=ON
                                                   L2 AND L3
L4
              1 SEA FILE=REGISTRY ABB=ON
                                          PLU=ON
                                                   "CITRIC ACID"/CN
L5
L6
           7125 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   77-92-9/CRN
              1 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   "TARTARIC ACID"/CN
L7
L8
           6999 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   87-69-4/CRN
              1 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   "GLUTARIC ACID"/CN
L9
           1097 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   110-94-1/CRN
L10
              1 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   "LACTIC ACID"/CN
L11
L12
           2101 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   50-21-5/CRN
              1 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   "MALIC ACID"/CN
L13
            975 SEA FILE=REGISTRY ABB=ON
                                           PLU=ON
                                                   6915-15-7/CRN
L14
              2 SEA FILE=REGISTRY ABB=ON
                                          PLU=ON
                                                   "GLUCONIC ACID"/CN
L15
            475 SEA FILE=REGISTRY ABB=ON
                                          PLU=ON
                                                   (133-42-6/CRN OR 526-95-4/CRN
L16
             32 SEA FILE=HCAPLUS ABB=ON PLU=ON (L1 OR L4) AND (L5 OR L6 OR
L20
                L7 OR L8 OR L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15 OR
```

=> d 120 ibib ab hitstr 1-32

L20 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

2003:912570 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:386381

TITLE: Composition for the treatment and prevention of

endothelial dysfunction

Petrus, Edward J. INVENTOR (S):

PATENT ASSIGNEE(S): USA

U.S. Pat. Appl. Publ., 8 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 947,674. CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

INDEX NAME)

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 2003215430	A1	20031120	US 2003-436528	20030514
	US 6596708	B1	20030722	US 2001-947674	20010907
PRIOR	RITY APPLN. INFO.:	:		US 2001-947674 A2	20010907
AB	This invention re	elates	to a method	and compns. for the	treatment and
	prevention of dis	order	s associated	with endothelial dy	sfunction. The compns.
	for the treatment	and]	prevention of	endothelial dysfun	ction in mammals
					alicylic acid, an amino
	sugar and a zinc	compo	und, combined	d with dietary suppl	ements. The amino
	sugar is selected	l from	a group of g	glucosamine, glucosa	mine-HCl,
	glucosamine sulfa	ate, N	-acetylglucos	samine and mixts.	
IT	546-46-3, Zinc ci	trate	29031-19-4,	Glucosamine sulfate	
	RL: THU (Therapeu	itic u	se); BIOL (Bi	ological study); US	ES (Uses)
	(composition f	or tr	eatment and p	prevention of endoth	elial dysfunction)
RN	546-46-3 HCAPLUS		-		_
CN	1,2,3-Propanetric	carbox	ylic acid, 2-	hydroxy-, zinc salt	(2:3) (9CI) (CA
	-		-	-	

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●3/2 Zn

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:757082 HCAPLUS

DOCUMENT NUMBER:

139:250342

TITLE:

Effervescent glucosamine, chondroitin and MSM formula

INVENTOR(S):

Phillips, Cleve Alan

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 5 pp., Cont. of U.S. Ser. No.

648,937, abandoned.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2003180389 A1 20030925 US 2003-394380 20030320

PRIORITY APPLN. INFO.: US 2000-648937 B1 20000825

Disclosed is a composition which acts to protect, maintain and repair connective tissue in mammals. The composition includes glucosamine, chondroitin sulfate and sulfur in an effervescent base as its major elements. The effervescent base includes one or more acids and one or more bases and may also include a starch, a flavoring agent and a coloring agent. The composition can be formed into a tablet or can be granular. The tablet or granular mixture is dissolved in a neutral pH liquid such as water for consumption purposes. Effervescent granules were prepared containing fructose 61.31, glucosamine 7.07, citric acid 7.07, chondroitin 5.66, baking soda 4.72, MSM sulfur 4.72, orange flavor 3.77, ascorbic acid 2.36, vanilla 1.41, silica 0.94, CaCO3 0.94, and riboflavin 0.01 %.

T7-92-9, Citric acid, biological studies 87-69-4,
Tartaric acid, biological studies 29031-19-4, Glucosamine
sulfate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effervescent compns. containing glucosamine and chondroitin and MSM for protecting and repairing connective tissue)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 87-69-4 HCAPLUS CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:633055 HCAPLUS

DOCUMENT NUMBER: 139:148803

TITLE: Cartilage enhancing food supplements and methods of

preparing the same

INVENTOR(S): Stone, Kevin R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S.

6,432,929. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA	TENT	NO.		KI	ND.	DATE			A	PPLI	CATIO	ON NO	ο.	DATE				
																		
US	2003	1526	42	A:	1	2003		U	S 20	02-1	3966	4	20020703					
US	6391	864		B :	1	2002	0521		U	5 19:	99-3	3802	1.	19990622				
US	6432	929		В:	1	2002	0813		U	5 20	00-5	9863	4	20000621				
WO	2004	0046	86	A:	2	2004	0115		W	20	03 - U	S209	69	20030703				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM.	HR.	HU.	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			•	•	•	•			•	•		•		NO,				
		•	•	•	•	•		•	•	•	•	•		TR,	•	•	•	
		•	•	•	•	•	•	•	•	•	•	•	•	KZ,	•	•	•	TM
	RW:		•		•	•	•	•	•	•		•	•	ZW,	•	•	•	
				•				•	-	•	•			IE,		-		
			-	-										CM,				
		•	•	•	•	SN,	•		,	,	,	,	,	J. 1,	J ,	02.7	-2 /	
PRIORIT	V ADD	•	•	•	•	•	•		US 1	999-	3380	21	Δ2	1999	0622			
111101111				• •										2000				
														1998				
														2002				
									US 2	002-	エロフロ	04	А	2002	0/03			

AB A food supplement, either in the form of a snack bar or a beverage, which contains one or more cartilage enhancing supplements is provided. The cartilage supplements include chondroitin, glucosamine, and hyaluronic acid. The food supplement may addnl. be fortified with cetyl myristoleate. The beverage is a mixture of a juice drink base which may include a water-based fruit flavored juice prepared using a pasteurization process at a relatively high temperature and a cartilage supplement solution which

includes a cartilage supplement prepared at a relatively low temperature. The beverage may be carbonated, non-carbonated or concentrated. The preferred cartilage supplement is glucosamine, preferably associated with a counter ion, more preferably as glucosamine HCl. The supplement also contains vitamin C (ascorbic acid) and calcium hydroxide powder.

TT 77-92-9, Citric acid, biological studies 29031-19-4,
Glucosamine sulfate

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (cartilage enhancing food supplements and methods of preparing the same) 77-92-9 HCAPLUS

RN 77-92-9 HCAPLUS CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 29031-19-4 HCAPLUS CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:590615 HCAPLUS

DOCUMENT NUMBER: 139:138749

TITLE: Dietary supplements comprising aminosaccahrides for

treating pain and inflammation

INVENTOR(S): Cho, Suk H.

PATENT ASSIGNEE(S): Melaleuca, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003143292	A1	20030731	US 2002-39246	20020104
IIC 6712006	כם	20040220		

US 6713096 B2 20040330

PRIORITY APPLN. INFO.: US 2002-39246 20020104

AB Dietary supplement compns. comprising aminosaccahrides, a ginger component and an enzyme, can be used to reduce pain, inflammation, stiffness, and/or discomfort associated with inflammatory conditions such as arthritis. Capsules contained glucosamine-HCl 510.00, calcium citrate 100.00, ginger root extract 75.00, rice flour 56.00, a mixture of fungal protease and protease and papain 70.00, green tea extract 75.00, Mg stearate 10.00, hydroxypropyl cellulose 50.00, and silicon dioxide 6.00 mg.

IT 29031-19-4, Glucosamine sulfate 439666-12-3

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dietary supplements comprising aminosaccahrides for treating pain and inflammation)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 439666-12-3 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 50-21-5 CMF C3 H6 O3

L20 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:563064 HCAPLUS

DOCUMENT NUMBER:

139:122748

TITLE:

Anti-inflammatory composition for the treatment and

prevention of endothelial dysfunction

INVENTOR(S):

Petrus, Edward J.

PATENT ASSIGNEE(S):

Advanced Medical Instruments, USA

SOURCE:

U.S., 7 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6596708	B1	20030722	US 2001-947674	20010907
US 2003215430	A1	20031120	US 2003-436528	20030514
PRIORITY APPLN. INFO.	:		US 2001-947674 A2	20010907

AB A composition for the treatment and prevention of endothelial dysfunction comprising a therapeutically effective amount of anti-inflammatory agents comprising; acetylsalicylic acid, an amino sugar and a zinc compound

IT 546-46-3, Zinc citrate 29031-19-4, Glucosamine sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-inflammatory composition for the treatment and prevention of endothelial dysfunction)

RN 546-46-3 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)

$${\rm ^{CO_2H}_{HO_2C-\,CH_2-\,C-\,CH_2-\,CO_2H}_{C-\,CH_2-\,CO_2H}_{OH}}$$

●3/2 Zn

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:530151 HCAPLUS

DOCUMENT NUMBER:

139:296935

TITLE:

Agent for prophylaxis and treatment of urolithiasis Orlova, S. V.; Belousova, A. S.; Kuz'micheva, G. M.; Belousov, S. R.; Alyaev, Yu. G.; Rappoport, L. M.;

Rudenko, V. I.; Chaban, N. G.

PATENT ASSIGNEE(S):

Russia

SOURCE:

Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE:

INVENTOR (S):

Patent.

LANGUAGE:

Russian

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2205655	C1	20030610	RU 2002-104548	20020222
PRIORITY APPLN. INFO.	:	•	RU 2002-104548	20020222

The invention relates to an agent used in prophylaxis and treatment of urolithiasis. The proposed agent involves a food supplement where vegetable components are combined in the ratio from 1:1 to 3:1 where in addition to the known medicinal lovage (Levisticum) and rosemary it comprises the following raw materials: upright cinquefoil rhizomes, madder roots, common bear berry leaves, field horse-tail herb, knot-grass herb, Orthosiphon staminosus, quercetin and citrus bioflavanoids, mineral components, such as chondroitin sulfate, glucosamine sulfate, potassium citrate and magnesium citrate and vitamins: beta-carotene and pyridoxine being all components are taken in the definite amts. In addition to its diuretic effect, the proposed agent shows antibacterial, anti-inflammatory, stone-loosening, membrane-stabilizing and capillary-strengthening effects.

7778-49-6, Potassium citrate 7779-25-1, Magnesium ITcitrate 29031-19-4, Glucosamine sulfate RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(agent for prophylaxis and treatment of urolithiasis)

RN 7778-49-6 HCAPLUS

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, potassium salt (9CI) (CA CN INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●x K

7779-25-1 HCAPLUS RN

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, magnesium salt (9CI) (CA CN INDEX NAME)

$$^{\mathrm{CO}_{2}\mathrm{H}}_{\mid}$$
 $^{\mathrm{HO}_{2}\mathrm{C}-\mathrm{CH}_{2}-\mathrm{C}-\mathrm{CH}_{2}-\mathrm{CO}_{2}\mathrm{H}}_{\mid}$ $^{\mathrm{O}_{1}\mathrm{H}}_{\mid}$ $^{\mathrm{O}_{2}\mathrm{H}}_{\mid}$ $^{\mathrm{O}_{1}\mathrm{H}}_{\mid}$

●x Mg

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:511160 HCAPLUS

DOCUMENT NUMBER: 139:63365

TITLE: Use of hyperforin or St. John's wort extracts for the

treatment of anaphylactic shock and for maintaining

and improving bone health

INVENTOR(S): Werz, Oliver; Albert, Dana; Steinhilber, Dieter; Bock,

Andreas

PATENT ASSIGNEE(S): Phenion GMBH & Co. KG, Germany

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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                                         -----
                           20030703
     WO 2003053456
                    A1
                                         WO 2002-EP14207 20021213
        W: AU, BR, BY, CA, CN, DZ, HU, ID, IL, IN, JP, KR, MX, NO, NZ, PL,
            RO, RU, SG, UA, US, UZ, VN, YU, ZA
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
            LU, MC, NL, PT, SE, SI, SK, TR
     DE 10163676
                     A1 20030710
                                         DE 2001-10163676 20011221
PRIORITY APPLN. INFO.:
                                      DE 2001-10163676 A 20011221
     The invention discloses the use of hyperforin or St. John's wort
     (hypericum) exts. for the prophylaxis and/or therapy of anaphylactic shock
     and for maintaining and improving bone health, particularly for treating
     osteoporosis, and as a nutritional supplement and for pharmaceutical
    prepns. containing hyperforin or St John's wort extract
    50-21-5, Lactic acid, biological studies 29031-19-4,
    Glucosamine sulfate
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (hyperforin or St. John's wort exts. for treatment of anaphylactic
       shock and for maintaining and improving bone health)
RN
     50-21-5 HCAPLUS
CN
    Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)
   OH
Me-CH-CO2H
    29031-19-4 HCAPLUS
CN
    D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)
    CM
    CRN 7664-93-9
    CMF H2 O4 S
     - ОН
    CM
         2
    CRN
        3416-24-8
    CMF C6 H13 N O5
Absolute stereochemistry. Rotation (+).
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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN 2003:472353 HCAPLUS

8

ACCESSION NUMBER: DOCUMENT NUMBER:

139:41821

TITLE:

REFERENCE COUNT:

Glucosamine organic acid adducts

INVENTOR(S):

Fosdick, Lawrence E.; Bauer, Timothy W.; Bohlmann,

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

John A.; Hwang, Kioh; Rogers, Brent D. Cargill, Incorporated, USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 22 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA.	rent :	NO.		KI	MD	DATE			A.	PPLI	CATI	ON N	Ο.	DATE			
									-								
WO	2003	0496	96	A:	2	2003	0619		W	0 20	02-U	S393	09	2002	1206		
WO	2003	0496	96	A.	3	2003	1016										
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,
		RU,	TJ,	TM													
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	ŪĠ,	ZM,	ZW,	ΑT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											

PRIORITY APPLN. INFO.:

US 2001-339004P P 20011207

The invention pertains to dietary supplement compns. containing glucosamine organic acid adducts (GOA), methods of making such compns. and methods of using such compns. GOA is prepared by partial crystallization, demonstrating the

ability to use the relative solubilities of glucosamine and the organic acid in controlling the product composition, or by surface crystallization in which a solution

of one component, e.g., an organic acid, is sprayed onto the other component in solid form, followed by moisture removal. GOA has tableting characteristics similar to glucosamine. For example, 1 mol glucosamine hydrochloride was dissolved in 1 L of water and 2 mol of citric acid were added creating a 1:2 glucosamine-citric acid ratio. To this solution 1 mol of NaOH was slowly added and mixed at room temperature The solution was placed in

a rotary evaporator under vacuum at 60° until 50-70% of the water evaporated resulting in formation of crystals. Crystals were isolated by vacuum filtration and dried in open pans at room temperature

439666-12-3 544455-21-2 544455-22-3 IT

544455-23-4 544455-25-6 544455-26-7

544455-27-8 544455-28-9 544455-29-0

544455-30-3 544455-31-4

RL: FFD (Food or feed use); FMU (Formation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(preparation of glucosamine organic acid adducts as dietary supplement or

food

ingredient)

RN 439666-12-3 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 50-21-5 CMF C3 H6 O3

RN 544455-21-2 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (5:1) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} {\rm CO_2H} \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ {\rm OH} \end{array}$$

544455-22-3 HCAPLUS RN

D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (3:1) CN (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 77-92-9 CMF C6 H8 O7

544455-23-4 HCAPLUS RN

D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (1:1) CN(9CI) (CA INDEX NAME)

CM

1

CRN 3416-24-8

CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CRN 77-92-9 CMF C6 H8 O7

RN 544455-25-6 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 544455-26-7 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (1:5) (9CI) (CA INDEX NAME)

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} \text{CO}_2\text{H} \\ | \\ \text{HO}_2\text{C} - \text{CH}_2 - \text{C} - \text{CH}_2 - \text{CO}_2\text{H} \\ | \\ \text{OH} \end{array}$$

RN 544455-27-8 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8

CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 77-92-9

CMF C6 H8 O7

$$\begin{array}{c|c}
\text{CO}_2\text{H} \\
\text{HO}_2\text{C}-\text{CH}_2-\text{C}-\text{CH}_2-\text{CO}_2\text{H} \\
\text{OH}
\end{array}$$

RN 544455-28-9 HCAPLUS CN D-Glucose, 2-amino-2-deoxy-, bis(2-hydroxypropanoate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

. CRN 50-21-5 CMF C3 H6 O3

RN 544455-29-0 HCAPLUS CN D-Glucose, 2-amino-2-deoxy-, hydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 6915-15-7 CMF C4 H6 O5

CM 2

CRN 3416-24-8 CMF C6 H13 N O5 Absolute stereochemistry. Rotation (+).

RN 544455-30-3 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydroxybutanedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 6915-15-7 CMF C4 H6 O5

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 544455-31-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydroxybutanedioate (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 6915-15-7 CMF C4 H6 O5

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

29031-19-4, Glucosamine sulfate IT

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of glucosamine organic acid adducts as dietary supplement or

food

ingredient)

29031-19-4 HCAPLUS RN

D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME) CN

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:352147 HCAPLUS

DOCUMENT NUMBER: 138:343925

TITLE:

Storage-stable poultices containing glucosamine

Hamamoto, Hidetoshi; Ueda, Aki Teikoku Seiyaku Co., Ltd., Japan INVENTOR(S): PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 7 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2003128557 A2 20030508 JP 2001-317930 20011016

PRIORITY APPLN. INFO.: JP 2001-317930 20011016

The poultices, useful for treatment of inflammation, etc., contain glucosamine and crosslinked hydrogels showing pH ≤5 and containing water-soluble polymers, H2O, crosslinking agents, and pH adjusters. Glucosamine HCl salt 4.0, poly(acrylic acid) 5.0, Na polyacrylate 5.0, CM-cellulose 2.0, gelatin 0.4, poly(vinyl alc.) 0.1, Na edetate 0.1, kaolin 2.0, glycerin 20.0, sorbitol solution 10.0, Al(OH)3 0.2, AlCl3 0.1, malic acid 3.0, tartaric acid 1.0, Polysorbate 80 0.1, castor oil 1.0, methylparaben 0.2, and H2O to 100 weight% were mixed and applied on a nonwoven fabric to give a poultice, which showed no discoloration during storage for 6 mo.

87-69-4, Tartaric acid, biological studies 6915-15-7,
Malic acid

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pH adjuster; storage-stable poultices containing glucosamine and crosslinked hydrogels)

RN 87-69-4 HCAPLUS

CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 6915-15-7 HCAPLUS

CN Butanedioic acid, hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

IT 29031-19-4, Glucosamine sulfate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (storage-stable poultices containing glucosamine and crosslinked hydrogels)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:282111 HCAPLUS

DOCUMENT NUMBER:

138:286531

TITLE:

Nutritional compositions, kits, and methods for

promoting defined health benefits

INVENTOR (S):

Kern, Kenneth norman; Heisey, Matthew Thomas

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S.

Ser. No. 586,213, abandoned.

CODEN: USXXCO

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.		APPLICATION NO. DATE
US 2003069202	A1 20030410	US 2001-760280 20010112
WO 2001093847	A2 20011213	WO 2001-US17714 20010601
W: AE, AG,	AL, AM, AT, AT,	AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO,	CR, CU, CZ, CZ,	DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
		HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
· · · · · · · · · · · · · · · · · · ·		LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
MZ, NO,	NZ, PL, PT, RO,	RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
		VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
RU, TJ,	TM	
RW: GH, GM,	KE, LS, MW, MZ,	SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK,	ES, FI, FR, GB,	GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF,	CG, CI, CM, GA,	GN, GW, ML, MR, NE, SN, TD, TG
EP 1289510	A2 20030312	EP 2001-946030 20010601
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI,	LT, LV, FI, RO,	MK, CY, AL, TR
JP 2003535126	T2 20031125	JP 2002-501420 20010601
PRIORITY APPLN. INFO	· :	US 2000-586213 B2 20000602
		US 2001-760280 A 20010112

WO 2001-US17714 W 20010601

AB The present invention is directed to compns. comprising: (a) a first component selected from the group consisting of gelatin, cartilage, aminosugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts thereof, and mixts. thereof; and (b) a second component comprising: (i) a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. thereof; and (ii) an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the composition promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a composition as defined herein.

IT 50-21-5, Lactic acid, biological studies 77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid, biological studies 526-95-4, Gluconic acid 6915-15-7, Malic acid 29031-19-4, Glucosamine sulfate 142606-53-9 433685-09-7

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nutritional compns., kits, and methods for promoting defined health benefits)

RN 50-21-5 HCAPLUS

CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 87-69-4 HCAPLUS

CN Butanedioic acid, 2,3-dihydroxy- (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 526-95-4 HCAPLUS

CN D-Gluconic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 6915-15-7 HCAPLUS

CN Butanedioic acid, hydroxy- (9CI) (CA INDEX NAME)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 142606-53-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, calcium salt, mixt. with hydroxybutanedioic acid calcium salt (9CI) (CA INDEX NAME)

- CM 1

CRN 17482-42-7 CMF C4 H6 O5 . x Ca

●x Ca

CM 2

CRN 7693-13-2 CMF C6 H8 O7 . x Ca

$$\begin{array}{c} \text{CO}_2\text{H} \\ | \\ \text{HO}_2\text{C} - \text{CH}_2 - \text{C} - \text{CH}_2 - \text{CO}_2\text{H} \\ | \\ \text{OH} \end{array}$$

●x Ca

RN 433685-09-7 HCAPLUS
CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt), potassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:736725 HCAPLUS

DOCUMENT NUMBER:

137:268432

TITLE:

Solid-dosage forms for weight loss product .

INVENTOR (S):

Fleischner, Albert M.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002136782	A1	20020926	US 2001-761622	20010118
US 6420350	B1	20020716	US 2001-928715	20010813
PRIORITY APPLN. INFO.	:		US 2001-761622 A2	20010118

AB Supplement compns. designed to support weight loss and increase energy are disclosed. The compns., to support weight loss and increase energy, comprise vitamin B6, zinc, manganese, chromium, Gymnema sylvestre leaf and extract, vanadium, glucosamine sulfate, lipotropic blend, appetite control blend, and thermogenic herbal concs. The compns. can be used in capsules or tablets.

IT 546-46-3, Zinc citrate 29031-19-4, Glucosamine sulfate
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid-dosage forms for weight loss product)

RN 546-46-3 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA INDEX NAME)

$$^{\mathrm{CO}_2\mathrm{H}}_{\mid \mathrm{HO}_2\mathrm{C}-\,\mathrm{CH}_2-\,\mathrm{C}-\,\mathrm{CH}_2-\,\mathrm{CO}_2\mathrm{H}}_{\mid \mathrm{OH}}$$

●3/2 Zn

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:693120 HCAPLUS

DOCUMENT NUMBER:

137:210995

TITLE:

Neutrophil function inhibitors which contain

glucosamine

INVENTOR(S):

Nagaoka, Isao; Sakamoto, Koji

PATENT ASSIGNEE(S):

Dainichiseika Color & Chemicals Mfg. Co. Ltd., Japan

SOURCE:

Eur. Pat. Appl., 10 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		APPLICATION NO. DATE	
EP 1238669 EP 1238669	A2 2002091	11 EP 2001-116700 20010717	
R: AT, BE,	CH, DE, DK, ES	S, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, D, MK, CY, AL, TR	,
•		18 JP 2001-64646 20010308	
NO 2001003535	A 2002090	09 NO 2001-3535 20010717	
US 2002128230	A1 2002091	12 US 2001-906771 20010718	
US 6627621	B2 2003093	30	
CN 1374086	A 2002101	16 CN 2001-125453 20010718	
PRIORITY APPLN. INFO) .:	JP 2001-64646 A 20010308	
AB Glucosamine sal	ts are effectiv	ve for the inhibition of neutrophil	
functions, and diseases, cause active oxygen a disease syndrom	hence, are usefed as a result of and antibiotic p and adult res	ful for the prevention and/or treatment of of an excessive extracellular release of proteins by neutrophils, such as respirato spiratory disease syndrome. Use of ore, provide neutrophil function inhibitor	ory

preventives and/or remedies for diseases caused as a result of an excessive extracellular release of active oxygen and antibiotic proteins by neutrophils, and also methods for the prevention and/or treatment of such diseases. Glucosamine hydrochloride inhibited in a concentration dependent

manner (0.01-1 mM) the formation of active oxygen by N-formyl-1-methionyl-1-leucyl-1-phenylalanine or opsonized zymosan.

IT 29031-19-4, Glucosamine sulfate 457048-78-1

457048-79-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(neutrophil function inhibitors which contain glucosamine)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 457048-78-1 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxy-1,2,3-propanetricarboxylate (salt) (9CI) (CA INDEX NAME)

CM 3

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

1

CM 2

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 457048-79-2 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, hydroxybutanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 6915-15-7 CMF C4 H6 O5

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:688479 HCAPLUS

DOCUMENT NUMBER:

137:222055

TITLE:

A dietary supplement containing calcium and vitamin D for promoting healthy bone structure

INVENTOR(S):

Krumhar, Kim C.; Johnson, Holly A.

PATENT ASSIGNEE(S):

Metagenics, Inc., USA

SOURCE:

U.S., 16 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6447809	B1	20020910	US 2000-568903 20000511
US 2003059481	A1	20030327	US 2002-241616 20020909
PRIORITY APPLN. INFO.	:		US 1999-133603P P 19990511
			US 2000-568903 A1 20000511

A dietary supplement for benefitting human bone health includes a calcium AB source, a source of vitamin D activity, and an osteoblast stimulant. A preferred calcium source is microcryst. hydroxyapatite, which also contains protein (mostly collagen), phosphorus, fat, and other minerals. A preferred source of vitamin D activity is cholecalciferol, and a preferred osteoblast stimulant is ipriflavone. In addition to these basic ingredients, the composition can further include various other minerals known to occur in bone, vitamin C, and glucosamine sulfate, all of which exert beneficial effects on growth and maintenance of healthy bone. A method for benefitting human bone health involves administering a daily regimen of the dietary supplement. For example, tablets contained microcryst. hydroxyapatite 1000 mg, cholecalciferol 200 IU, ipriflavone (an osteoblast stimulant) 200 mg, dicalcium phosphate 700 mg, and a source of magnesium

77-92-9D, Citric acid, boron complexes 527-09-3, Copper TТ gluconate 546-46-3, Zinc citrate 869-06-7, Magnesium malate 7779-25-1, Magnesium citrate 29031-19-4, Glucosamine sulfate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral dietary supplement containing calcium source, vitamin D, and ipriflavone for promoting healthy bone structure)

RN77-92-9 HCAPLUS

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

527-09-3 HCAPLUS RN

Copper, bis(D-gluconato-κ01,κ02)- (9CI) (CA INDEX NAME)

RN546-46-3 HCAPLUS

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, zinc salt (2:3) (9CI) (CA CNINDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●3/2 Zn

869-06-7 HCAPLUS RN

Butanedioic acid, hydroxy-, magnesium salt (1:1) (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH----} \text{CH}_2\text{----} \text{CO}_2\text{H} \end{array}$$

Mg

RN7779-25-1 HCAPLUS

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, magnesium salt (9CI) (CA CNINDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●x Mg

29031-19-4 HCAPLUS RN

D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME) CN

CM 1

CRN 7664-93-9

CMF H2 O4 S

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:503626 HCAPLUS

DOCUMENT NUMBER:

137:62507

TITLE:

Compositions containing Withania somnifera Dunal and glucosamine and food, feed, and drugs containing the

compositions

INVENTOR(S):

Kameyama, Hiroshi; Maesaki, Yuji

PATENT ASSIGNEE(S):

Nippon Kayaku Co., Ltd., Japan; Nippon Kayaku Food

Techno K. K.

SOURCE:

Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE

JP 2002187846

A2 20020705 JP 2001-279650

PRIORITY APPLN. INFO.:

JP 2001-279650 20010914 JP 2000-311779 A 20001012

AB Compns. containing W. somnifera and glucosamine (I) and foods, feeds, antiarthritics, and antirheumatics containing the compns. are claimed. W somnifera may be used as exts. of the root containing withaferin A, sitoindosides, and withanolides. Simultaneous administration of tablets of W. somnifera extract and I HCl tablets to volunteers having subjective symptoms of arthritis or rheumatoid arthritis for 4 wk significantly relieves the symptoms. Capsules, granules, tablets, etc., containing the

and I HCl or sulfate were also manufactured

IT 29031-19-4, Glucosamine sulfate 439666-12-3

RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiarthritic and antirheumatic compns. containing Withania somnifera and glucosamine)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 439666-12-3 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

CM 2

CRN 50-21-5 CMF C3 H6 O3

L20 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:429542 HCAPLUS

DOCUMENT NUMBER:

137:11003

TITLE:

Chondroprotective/restorative compositions containing

hyaluronic acid

INVENTOR (S):

Pierce, Scott W.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

36%,

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. ____ ----------_____ -----20020606 US 2001-967977 20011002 US 2002068718 A1 US 2000-237838P P 20001003 PRIORITY APPLN. INFO.:

An oral composition based on hyaluronic acid or its salts and optionally a therapeutic drug is provided for treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post-operative arthroscopic surgery, deterioration of proper joint function including joint mobility, the reduction or inhibition of metabolic activity of chondrocytes, the activity of enzymes that degrade cartilage, and the reduction or inhibition of the production of hyaluronic acid in a

Addnl., compns. containing hyaluronic acid, chondroitin sulfate and glucosamine sulfate in a paste formulation are also described which can be administered on their own or can be used as a feed additive for cats and dogs. For example, a composition contained (by weight) glucosamine sulfate

chondroitin sulfate 4%, sodium hyaluronate 0.144%, manganese sulfate 0.144%, ibuprofen 200 mg, powdered sugar 20%, glycerin 0.7%, xanthan gum 0.2%, sodium benzoate 0.7%, citric acid 0.2%, molasses 23.5%, and water 14.4%.

29031-19-4, Glucosamine sulfate TΤ

RL: FFD (Food or feed use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chondroprotective/restorative compns. containing hyaluronic acid for treatment of joint disorders)

RN 29031-19-4 HCAPLUS

D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME) CN

CM 1

CRN 7664-93-9 CMF H2 O4 S

HO-S-OH

12

CRN 3416-24-8

CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 50-21-5 HCAPLUS CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 51-42-3 HCAPLUS CN 1,2-Benzenediol, 4-[(1R)-1-hydroxy-2-(methylamino)ethyl]-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

CM 2

CRN 51-43-4 CMF C9 H13 N O3

Absolute stereochemistry. Rotation (-).

RN 68-04-2 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●3 Na

RN 77-92-9 HCAPLUS CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 143-71-5 HCAPLUS

CN Morphinan-6-one, 4,5-epoxy-3-methoxy-17-methyl-, (5α) -, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 125-29-1

CMF C18 H21 N O3

Absolute stereochemistry. Rotation (-).

CRN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

RN 7054-25-3 HCAPLUS

CN D-Gluconic acid, compd. with (9S)-6'-methoxycinchonan-9-ol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 526-95-4 CMF C6 H12 O7

Absolute stereochemistry.

CM 2

CRN 56-54-2

CMF C20 H24 N2 O2

Absolute stereochemistry. Rotation (+).

RN 18472-51-0 HCAPLUS

CN D-Gluconic acid, compd. with N,N''-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazatetradecanediimidamide (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 526-95-4 CMF C6 H12 O7

Absolute stereochemistry.

CM 2

CRN 55-56-1 CMF C22 H30 Cl2 N10

RN 56392-17-7 HCAPLUS

CN 2-Propanol, 1-[4-(2-methoxyethyl)phenoxy]-3-[(1-methylethyl)amino]-, (2R,3R)-2,3-dihydroxybutanedioate (2:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 51384-51-1 CMF C15 H25 N O3

$$\begin{array}{c} \text{OH} \\ \text{i-PrNH-CH}_2\text{-CH-CH}_2\text{-O} \end{array}$$

CM 2

CRN 87-69-4 CMF C4 H6 O6

Absolute stereochemistry.

RN 88637-37-0 HCAPLUS

CN Ethanamine, 2-(diphenylmethoxy)-N,N-dimethyl-, 2-hydroxy-1,2,3-propanetricarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

CM 2

CRN 58-73-1 CMF C17 H21 N O

Ph2CH-O-CH2-CH2-NMe2

L20 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:408783 HCAPLUS

DOCUMENT NUMBER: 137:2412

TITLE: Petunia hybrida gene Shooting encoding cytokinin

biosynthesis enzyme tRNA-IPT and uses in plant growth

regulation and cosmetic preparations

INVENTOR(S): Meyer, Peter; Zubko, Elena
PATENT ASSIGNEE(S): University of Leeds, UK
SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DA'	TE	APPLICATION NO.	DATE
WO 2002042440	A2 20	020530	WO 2001-GB5175	20011126
WO 2002042440	A3 20	021017		
W: AE, AG	, AL, AM, A'	T, AU, AZ, I	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
CO, CR	CU, CZ, D	E, DK, DM, I	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,
GM, HR	, HU, ID, I	L, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,
LS, LT	, LU, LV, M	A, MD, MG, N	MK, MN, MW, MX, MZ,	NO, NZ, OM, PH,

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PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2002023877
                      A5
                           20020603
                                          AU 2002-23877
                                                            20011126
                            20040506
                                           EP 2001-997545
    EP 1414951
                      A2
                                                            20011126
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           US 2003-432534
    US 2004117871
                            20040617
                      A1
                                                            20030702
PRIORITY APPLN. INFO.:
                                                        A 20001125
                                        GB 2000-28827
                                        GB 2001-971
                                                         A 20010113
                                        GB 2001-23970
                                                         Α
                                                            20011005
                                                         W 20011126
                                        WO 2001-GB5175
     The present invention provides a naturally occurring plant gene encoding a
AΒ
     cytokinin (CK) biosynthesis enzyme. In an activation tagging experiment a
     Petunia hybrida line was identified that showed CK-specific effects
     including control of cellular processes such as plant growth, enhanced
     shooting, reduced apical dominance and delayed senescence and flowering.
     This phenotype correlated with the enhanced expression of a gene we
     labeled Shooting (Sho). The petunia "Shooting" gene, which encodes a
     homolog to Arabidopsis thaliana transfer ribonucleate-
     isopentenyltransferase (tRNA-IPT)-like proteins, also causes CK-specific
     effects when expressed in other plant species. In contrast to the ipt
     gene from Agrobacterium, which primarily increases CK zeatin levels,
     Shooting expression in petunia and tobacco especially enhances the levels of
     certain N6-(\Delta 2-isopentenyl) adenosine (2iP) derivs. The present
     invention provides Petunia Shooting gene and protein sequences and uses
     therefor and control thereof in the production of plants and/or plant cells
     that are capable of exhibiting a variety of advantageous characteristics
     associated with CK regulated processes. A further aspect of the invention
     there is provided use as a cosmetic to reduce the signs of skin ageing the
     plant extract which includes a transcriptionally activated/activatable form
     of the Shooting.
IT
     50-21-5, biological studies 29031-19-4, Glucosamine
     sulfate
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic preparation further comprising; petunia gene Shooting encoding CK
       biosynthesis enzyme tRNA-IPT and plant growth regulation and cosmetic
       prepns.)
RN
     50-21-5 HCAPLUS
     Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)
   OH
Me-CH-CO2H
RN
     29031-19-4 HCAPLUS
    D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)
     CM
         7664-93-9
     CRN
     CMF H2 O4 S
```

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

IT 72-17-3, Sodium lactate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (petunia gene Shooting encoding CK biosynthesis enzyme tRNA-IPT and plant growth regulation and cosmetic prepns.)

RN 72-17-3 HCAPLUS

CN Propanoic acid, 2-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

L20 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:158383 HCAPLUS

DOCUMENT NUMBER: 136:205508

TITLE: Collagen-based composition and method for growing,

protecting, and healing tissues and cells

INVENTOR(S): Petito, George D.; Petito, Anita M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S.

Ser. No. 360,169.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 2002025921 A1 20020228 US 2001-983274 20011023

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US 6476005
                                              US 1999-360169
                                                                 19990726
                        В1
                              20021105
     WO 2003034993
                                              WO 2002-US33724
                                                                 20021023
                        A2
                              20030501
                        A3
                              20040226
     WO 2003034993
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
              NE, SN, TD, TG
     US 2003212005
                                              US 2003-457599
                                                                 20030610
                        A1
                              20031113
                                           US 1999-360169 A2 19990726
PRIORITY APPLN. INFO.:
                                           US 1998-46710
                                                              B2 19980324
                                           US 2001-983274
                                                              A 20011023
```

A composition and method for facilitating the growth, protection and healing of AB tissues and cells in animals and humans are described. The composition is formulated as either a powder, gel, paste, film, fluid injectable, rehydratable freeze-dried paste or sponge, sprayable solution, topically applied patch with adhesive and reservoir system, an intermediate for coatables such as films and bandages, a matrix for membranes, or as a matrix of flexible polymer(s), or delivered as an oral liquid, tablet or capsule. The main ingredients are hydrolyzed Type I collagen having a mol. weight of 1000-10,000, polysulfated glycosaminoglycans, a hyaluronic acid salt, a glucosamine salt, and optionally, a chelated manganese ascorbate and L-malic acid. In the topical form, the composition is administered to the cleaned wound site where it absorbs exudate, provides a phys. barrier to bacterial infestation, reduces pain, and expedites wound healing by having chemotactic, hemostatic, bacteriostatic, and other therapeutic benefits. Scars are advantageously reduced. For example, a diabetic patient with an advanced wound of a 14 yr old graft site in area from amputation of 15% of one infected foot received weekly applications of biodegradable hydrolyzed collagen in powder and gel form absent preservatives or alcs. The wound healed in 27 days.

IT 29031-19-4, Glucosamine sulfate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. based on hydrolyzed collagen, glycosaminoglycans, and hyaluronic acid or glucosamine salt for growing, protecting, and healing tissues and cells)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

IT 77-92-9, Citric acid, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. based on hydrolyzed collagen, glycosaminoglycans, and hyaluronic acid or glucosamine salt for growing, protecting, and healing tissues and cells)

77-92-9 HCAPLUS RN

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

L20 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:143204 HCAPLUS

DOCUMENT NUMBER: 136:189383

A water-free transdermal delivery system TITLE:

INVENTOR(S): Dransfield, Charles William

PATENT ASSIGNEE(S): Australia

SOURCE: U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE -----------US 2002022052 US 2001-863764 A1 20020221 20010524 AU 2000-6691 A 20000406 PRIORITY APPLN. INFO.: AU 2000-8885 A 20000721

A transdermal or transepithelial composition substantially free of water AB comprises a biol. active agent in the form of microfined particles, sized less than 2 μ down to less than 0.1 μ , which by massage pressure are mech. entrained within the interstices of the stratum corneum. Particles < 0.5 μ do not require a carrier for entrainment. Delivery into mucosal epithelia is obtained by particles $< 1 \mu$ with delivery increasing with decreasing particle size. For example, in order to demonstrate the present invention, two compns. containing ibuprofen as the active agent were prepared Particles in both samples were identical (< 0.5 $\mu m)$. However, sample A was water-free, while sample B contained 10% water. Transdermal absorption of the ibuprofen prepns. were compared using fresh bovine udder skin mounted on Franz diffusion cells at 37°. Approx. 30 mg of the ibuprofen preparation was applied to the skin and massaged into the skin using a vibratory massager. The water free sample (A) demonstrated a higher rate of absorption in less time than a similar formulation containing 10% water (sample B). In sample B the delivery was more than halved and the time rate of the delivery was found to be greatly reduced with delivery curve showing 16% over 12 h and only a further 7.5% delivery over the next 12 h.

IT 6915-15-7, Malic acid 29031-19-4, Glucosamine sulfate
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(water-free transdermal and transepithelial drug delivery systems)

RN 6915-15-7 HCAPLUS CN Butanedioic acid, hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ | \\ \text{HO}_2\text{C---} \text{CH---} \text{CH}_2\text{---} \text{CO}_2\text{H} \end{array}$$

RN 29031-19-4 HCAPLUS CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:142489 HCAPLUS

DOCUMENT NUMBER: 136:189363

TITLE:
Preparation of tablet compositions
Mergens, William J.; Chang, Kuei Tu; Holly, Gerald T.
PATENT ASSIGNEE(S):
Rexall Sundown, Inc., USA
SOURCE:
PCT Int. Appl., 43 pp.
CODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

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APPLICATION NO. DATE
                   KIND DATE
    PATENT NO.
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                                       -----
    WO 2002013793
                   A2
                          20020221
                                      WO 2001-US20965 20010702
                    A3
                          20020815
    WO 2002013793
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CH, CN, CO,
            CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    B1 20020319 US 2000-639780 20000816
    US 6358526
                                     AU 2001-73122 20010702
EP 2001-952362 20010702
    AU 2001073122
                          20020225
                     A5
    EP 1309314
                          20030514
                     A2
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    BR 2001013305
                          20030715
                                       BR 2001-13305
                                                        20010702
                   Α
    JP 2004506007
                     T2
                          20040226
                                        JP 2002-518940 20010702
    US 2002150617
                     A1
                                        US 2002-59759
                                                       20020129
                          20021017
PRIORITY APPLN. INFO.:
                                     US 2000-639780 A 20000816
                                     WO 2001-US20965 W 20010702
```

- The present invention provides a method of making tablet compns. that are substantially free of excipients. The method includes forming a compactable granular mixture containing at least one compaction enhancing therapeutic compound, at least 1 other drug, that is different form the compaction enhancing drug, and <15% a non-aesthetic excipient. The compactable granular mixture thus obtained is compressed to form a tablet composition. The present invention also provides tablet compns. produced by the methods of the present invention that are substantially free of excipients. Tablets containing 470.59 mg chondroitin, 526.35 mg. PVP-granulated glucosamine, and 3.75 mg magnesium stearate were prepared. The PVP-granulated glucosamine contained 93 % glucosamine and 5% PVP. The tablets were evaluated for disintegration time, hardness, and friability.

 To 7693-13-2. Calcium citrate 29031-19-4. Glucosamine
- IT 7693-13-2, Calcium citrate 29031-19-4, Glucosamine sulfate
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of tablet compns.)
- RN 7693-13-2 HCAPLUS
- CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, calcium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

●x Ca

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM :

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:903816 HCAPLUS

DOCUMENT NUMBER: 136:42843

TITLE: Compositions, kits, and methods for promoting defined

health benefits

INVENTOR(S): Kern, Kenneth Norman; Heisey, Matthew Thomas

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2001093847
                     A2
                           20011213
                                          WO 2001-US17714 20010601
        W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
            FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
            KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
            MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
            TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU. TJ. TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A1
                           20030410
                                         US 2001-760280
                                                         20010112
    US 2003069202
    EP 1289510
                                          EP 2001-946030
                      A2
                           20030312
                                                           20010601
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                          20031125
                                          JP 2002-501420
                                                           20010601
    JP 2003535126
                      T2
PRIORITY APPLN. INFO.:
                                       US 2000-586213 A 20000602
                                       US 2001-760280
                                                        A 20010112
                                       WO 2001-US17714 W 20010601
    The present invention is directed to compns. comprising: (a) a first
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AB component selected from the group consisting of gelatin, cartilage, amino sugars, glycosaminoglycans, methylsulfonylmethane, precursors of methylsulfonylmethane, S-adenosylmethionine, salts and mixts.; and (b) a second component comprising a cation source selected from the group consisting of calcium, potassium, magnesium, and mixts. and an edible acid source. The present invention is further directed to food, beverage, pharmaceutical, over-the-counter, and dietary supplement products, which comprise the present compns. The invention also relates to kits comprising the present compns. and information that use of the composition promotes one or more of the presently defined health benefits, including joint health, bone health, cardiac health, and anti-inflammation. The present invention addnl. relates to methods of treating joint function, bone function, cardiac function, or inflammation comprising administering to a mammal a composition as defined herein. Thus, hard lemon candies are prepared by combining the following components as indicated: sugar 200, light corn syrup 63, water 60, lemon flavor glucosamine-HCl 16, and calcium citrate malate 14.9 g.

77-92-9, Citric acid, biological studies 87-69-4, ITTartaric acid, biological studies 526-95-4, Gluconic acid 29031-19-4, Glucosamine sulfate 216699-44-4 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. and kits for promoting defined health benefits)

77-92-9 HCAPLUS 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME) CN

$${\rm ^{CO_2H}}_{\rm HO_2C-\,CH_2-\,C-\,CH_2-\,CO_2H}_{\rm OH}$$

RN

87-69-4 HCAPLUS RN Butanedioic acid, 2,3-dihydroxy- (2R,3R)- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN 526-95-4 HCAPLUS

CN D-Gluconic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 216699-44-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt), compd. with potassium chloride (KCl) (2:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7447-40-7 CMF Cl K

Cl-K

CM 2

CRN 14999-43-0

CMF C6 H13 N O5 . 1/2 H2 O4 S

CM 3

CRN 7664-93-9 CMF H2 O4 S

CM 4

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:185507 HCAPLUS

DOCUMENT NUMBER: 134:192559

TITLE: Food product containing health-improving agents for

pets and process for manufacturing same

INVENTOR(S): Hodge, Jason; Richardson, Louise; Stoodley, Neil;

Giffard, Catriona; Collins, Stella Effem Foods Pty. Ltd., Australia

PATENT ASSIGNEE(S): Effem Foods Pty. Ltd., Au

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND
                            DATE
                                            APPLICATION NO.
     PATENT NO.
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     WO 2001017364
                       A1
                             20010315
                                            WO 2000-AU1055
                                                              20000906
     WO 2001017364
                       C2
                            20020829
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1229802
                           20020814
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                                                              20000906
                       A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                             20030304
                                            JP 2001-521166
                                                              20000906
     JP 2003508069
                       T2
                                            NZ 2000-517941
                             20030829
                                                              20000906
                       Α
     NZ 517941
                                         AU 1999-2665
                                                              19990906
PRIORITY APPLN. INFO.:
                                                          Α
                                         AU 2000-5182
                                                           Α
                                                              20000120
                                         WO 2000-AU1055
                                                           W 20000906
     This invention is concerned with packaged food products which contain
AΒ
     specific combinations of functional additives aimed at addressing specific
     health indicators, in particular flatulence, gastro-intestinal health,
     stress and immune system responsiveness, in pet animals.
                                                                There is
     provided a com. packaged mammal pet food product that includes a manufactured,
     shelf-stable food substrate and a combination of functional additives.
     The functional additives include at least one non-palatable plant-based
     remedy and/or dietary fiber source that are present to strengthen and/or
     maintain a specified health indicator of a mammal pet animal. The food
     product is portioned and packaged with the functional additives being
     present in predetd. concns. and amts. sufficient to be effective in
     achieving said indications on regular feeding of the pet animal with said
     food product. The food substrate is present in a proportion sufficient to
     mask the flavor and/or odor of the non-palatable additive and comprises a
     unique combination of materials that are able to be processed at lower
     temps. to preserve the natural botanical functional additive's activity.
     Functional additives intended to address dietary flatulence problems
     include a combination of Yucca extract, charcoal and salts of zinc, such as
     zinc acetate. Functional additives to promote or maintain
     gastrointestinal health include a combination of L-glutamine,
     D-glucosamine sulfate, sugar beet pulp, slippery elm. Functional
     additives to strengthen or maintain a pet animal's natural body defenses
     include a combination of vitamin E, vitamin B complex, primrose oil,
     vitamin C and Marigold meal. Functional additives to promote or maintain
     reduction of stress and/or improved behavior of a pet animal include a
     combination of Valerian root extract, Kava root extract, vitamin B complex and
     magnesium salt.
     77-92-9, Citric acid, biological studies 29031-19-4,
IT
     D-Glucosamine sulfate
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (feed product containing health-improving agents for pets and process for
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Searched by Paul Schulwitz (571)272-2527

1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

manufacturing same)

77-92-9 HCAPLUS

RN

CN

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

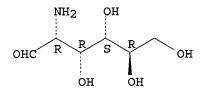
CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:31337 HCAPLUS

DOCUMENT NUMBER: 134:91157

TITLE: A formulation of glucosamine sulfate

INVENTOR(S): Maier, Hans

PATENT ASSIGNEE(S): Greither, Peter, Switz. SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001001993 A1 20010111 WO 1999-CH291 19990702

W: CA, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.:

WO 1999-CH291

19990702

AB A storage-stable formulation of glucosamine sulfate or a mixed salt thereof, comprising a fruit acid. In a prefered embodiment, the fruit acid, preferably citric acid, is provided in an amount roughly equal to glucosamine sulfate.

IT 77-92-9, Citric acid, biological studies

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(formulation of glucosamine sulfate)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

IT 29031-19-4, Glucosamine sulfate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (formulation of glucosamine sulfate)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:31336 HCAPLUS

DOCUMENT NUMBER: 134:91156

TITLE: A solid formulation of glucosamine sulfate

INVENTOR(S): Maier, Hans; Parekh, Harish

PATENT ASSIGNEE(S): SCA Lohnherstellungs A.-G., Switz.; Pharma Base S.A.

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001001992 A1 20010111 WO 1999-CH289 19990702
W: CA, US

PRIORITY APPLN. INFO.: WO 1999-CH289 19990702

AB An effervescent preparation of glucosamine sulfate or a mixed salt thereof, suitable for preparing a drinkable medicine and applying a patient's daily dosage in a single dose. In a prefered embodiment of the invention, the preparation comprises a fruit acid, preferably citric acid, as acid component and for the improvement of storage-stability. A further preferred dosage form are effervescent tablets.

IT 77-92-9, Citric acid, biological studies

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid formulation of glucosamine sulfate)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

IT 29031-19-4, Glucosamine sulfate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid formulation of glucosamine sulfate)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:911083 HCAPLUS

DOCUMENT NUMBER: 134:55838

TITLE: Cartilage-enhancing food supplements including snack

bars and juice-based beverages

INVENTOR(S): Stone, Kevin R.

PATENT ASSIGNEE(S): Joint Juice Incorporated, USA

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ ----------WO 2000078320 **A**1 20001228 WO 2000-US40267 20000621 W: AU, CA, JP, MX RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 6391864 20020521 US 1999-338021 19990622 B1 EP 1263418 A2 20021211 EP 2000-960108 20000621 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY JP 2003530072 T2 20031014 JP 2001-504383 20000621 PRIORITY APPLN. INFO.: US 1999-338021 19990622 Α US 1998-97038P Ρ 19980819 WO 2000-US40267 W 20000621

AB A food supplement, either in the form of a snack bar or a beverage, contains one or more cartilage-enhancing supplements, which may include chondroitin, glucosamine, and hyaluronic acid. The food supplement may addnl. be fortified with cetyl myristoleate. The beverage is a mixture of a juice drink base which may include a water-based fruit-flavored juice prepared using a pasteurization process at a relatively high temperature and a cartilage supplement solution which includes a cartilage supplement prepared at a relatively low temperature. The beverage may be carbonated, non-carbonated or concentrated. The preferred cartilage supplement is glucosamine, preferably associated with a counter ion (e.g., glucosamine HCl). Thus, a nutritional bar may contain chondroitin sulfate 1.5, glucosamine sulfate 1.5, hyaluronic acid 1.5, and cetyl myristoleate 1.5%, plus other constituents.

IT 77-92-9, Citric acid, biological studies 29031-19-4,

Glucosamine sulfate

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (cartilage-enhancing food supplements including snack bars and juice-based beverages)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:880946 HCAPLUS

DOCUMENT NUMBER: 134:25362

TITLE: Use of catechins for arthritis treatment,

compositions, and screening method

INVENTOR(S): Buttle, David; Adcocks, Clair; Collin, Peter

PATENT ASSIGNEE(S): University of Sheffield, UK

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

4) , : 1

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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KIND DATE
                                      APPLICATION NO. DATE
    PATENT NO.
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                                       WO 2000-GB2048
                                                        20000606
    WO 2000074662 A2
                         20001214
                    A3 20020314
    WO 2000074662
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
            ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
            LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
            SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A2 20020529
                                      EP 2000-935346 20000606
    EP 1207862
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003501381
                    T2 20030114
                                       JP 2001-501199
                                                        20000606
PRIORITY APPLN. INFO.:
                                     US 1999-137699P P 19990607
                                     GB 2000-7321
                                                    A 20000327
                                     WO 2000-GB2048
                                                    W 20000606
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- AB The invention relates to the use of catechins in the treatment of various forms of arthritis, including the use of combinations of catechins and other anti-arthritic agents in the treatment; medicaments and compns. for use in the treatment; and methods to identify agents with anti-arthritic properties.
- IT 29031-19-4, Glucosamine sulfate

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(catechins for arthritis treatment, compns., and screening method)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

IT 50-21-5, Lactic acid, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(chondrocyte lactate output; catechins for arthritis treatment, compns., and screening method)

RN 50-21-5 HCAPLUS

CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

L20 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:65552 HCAPLUS

DOCUMENT NUMBER: 132:127462

TITLE: Particles, in particular micro- or nanoparticles, of

crosslinked mono- and oligosaccharides, their production, and cosmetic, pharmaceutical, or food

compositions containing them

INVENTOR(S): Perrier, Eric; Rey-Goutenoire, Sylvie; Buffevant,

Chantal; Levy, Marie-Christine; Pariot, Nadine;

Edwards, Florence; Andry, Marie-Christine

PATENT ASSIGNEE(S): Coletica, Fr.

SOURCE: Ger. Offen., 34 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	AP:	PLICATION NO.	DATE
	DE 19932216	A1	20000127	DE	1999-19932216	19990709
	FR 2780901	A1	20000114	FR	1998-8809	19980709
	FR 2780901	B1	20000929			
	NL 1012517	C2	20000111	NL	1999-1012517	19990705
	KR 2000011579	Α	20000225	KR	1999-27476	19990708
	JP 2000038402	A2	20000208	JP	1999-196705	19990709
	JP 3437797	B2	20030818			
	US 6197757	B1	20010306	US	1999-350131	19990709
	ES 2155793	A1	20010516	ES	1999-1547	19990709
	ES 2155793	B1	20011201			
	IT 1311514	B1	20020313	ΙT	1999-T0599	19990709
PRIOR	RITY APPLN. INFO.	:	FR	19	98-8809 A	19980709
		•		7		

AB Particles consisting of ≥1 mono- or oligosaccharide, which are surface-crosslinked in emulsion by esterification of primary OH groups on the saccharides with a polyfunctional acylating agent, are useful as

carriers or encapsulating agents for various hydrophilic or lipophilic active substances in preparation of cosmetic, pharmaceutical, or food compns. The particles are biocompatible, biodegradable, and suitable for stabilization and protection of sensitive active substances or for their sustained release. The crosslinking reaction preferably occurs in a water-in-oil emulsion at room temperature and results in formation of a membrane

of crosslinked saccharide surrounding an aqueous phase. The saccharide may be a cyclodextrin; by forming an inclusion compound with an active substance, it can be used to remove or harvest the latter from a liquid medium, or alternatively can slowly release an active substance from an inclusion compound Thus, 6 mL of a 10% solution of dihydroxyacetone (a ketose) in 1M carbonate buffer (pH 11) was emulsified in 30 mL cyclohexane containing 5% Span 85, and with continued stirring, 40 mL of a 5% solution of terephthaloyl chloride in CHCl3-cyclohexane (1:4 by volume); after 30 min, the microcapsules were collected and washed. These microcapsules dissolved slowly in 1% Na2CO3 solution or in PEG owing to alcoholysis of the ester bonds; the released dihydroxyacetone reacted with glycine to form a brown color. The microcapsules can therefore be used in cosmetic tanning prepns.

IT 526-95-4, D-Gluconic acid 29031-19-4, D-Glucosamine sulfate

RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (crosslinked; particles of crosslinked mono- and oligosaccharides, their production, and cosmetic, pharmaceutical, or food compns. containing them)

RN 526-95-4 HCAPLUS

CN D-Gluconic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

IT 110-94-1D, Glutaric acid, dihalides

RL: RCT (Reactant); RACT (Reactant or reagent)

(particles of crosslinked mono- and oligosaccharides, their production, and cosmetic, pharmaceutical, or food compns. containing them)

RN 110-94-1 HCAPLUS

CN Pentanedioic acid (9CI) (CA INDEX NAME)

 $HO_2C-(CH_2)_3-CO_2H$

L20 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:561584 HCAPLUS

DOCUMENT NUMBER: 131:175090

TITLE: Topical compositions containing lecithins and

moisturizers for the treatment skin disorders

INVENTOR(S): Crandall, Wilson Trafton

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 9 pp., Cont.-in-part of U.S. 5,639,740.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		AP	PLIC	OITA	N NC	٥.	DATE			
				-									
US 5945	409	A	1999083	1	US	199	7-87	6764	1	1997	0616		
US 5639	740	A	1997061	7	US	199	5-40	3241	l	1995	0310		
AU 9725	503	A1	1998102	0	ΆU	199	7-25	503		1997	0325		
WO 9842	309		1998100	1									
	AL, AM,											CZ.	DE.
***		•	, GB, GE		•	•						•	
		•			•	•		•	•	•	•	•	•
	KP, KK,	KZ, LC	, LK, LR	, цъ,	LT,	ъυ,	ъ∨,	МД,	MG,	MK,	MIN,	ΜW,	MX,
	NO, NZ,	PL, PT	, RO, RU	, SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
	UA, UG,	UZ, VN	, YU, ZW	, AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM	
RW:	GH, GM,	KE, LS	, MW, SD	, sz,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,
	FR, GB,	GR, IE	, IT, LU	, MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,
	GA, GN,	ML, MR	, NE, SN	, TD,	TG	•	•	·		•		•	
AU 9867	750	A1	1998102	0	AU	J 199	8-67	750		1998	0325		
US 6316	428	B1	2001111	3	US	199	9-38	3779	9	1999	0826		
PRIORITY APP	LN. INFO	1.:			US 19	95-4	0324	1	A2	1995	0310		
					WO 19	97-U	S498	5	Α	1997	0325		
					US 19	97-8	7676	4	Α	1997	0616		
					WO 19	98-U	S591	.0	W	1998	0325		

The present invention comprises methods and compns. for topically treating AB and moisturizing keratinous structures of humans and animals including skin, hair, fingernails, toenails, hooves, and horns. The composition comprises water-dispersible lecithin and compds. selected from the group consisting of elastin, elastin fragments, elastin-glycolic acid, collagen, collagen fragments, yeast exts., skin respiratory factor, glucosamine, glucosamine sulfate, hyaluronic acid, hyaluronate, chondroitin sulfate, cholic acid, deoxycholic acid, ginseng extract, aloe vera powder, aloe vera oil, RNA and DNA fragments, ascorbyl palmitate, ascorbic acid, retinol palmitate, dehydroxycholesterol, vitamin E, vitamin E lineolate, panthenol Et ether, glycerol ceramides, glycogen, DL-pyroglutamic acid, urea, sodium lactate, lactate, glycerin, sorbitol, oils of borage, evening primrose, black currant, almond and canola, vanishing cream, cholesterol, flavonoids, witch hazel, chamomile, parsley, hibiscus, capric and caprylic triglycerides, amino acids, allantoin, sodium, calcium, potassium, phosphate, chloride, sodium lactate, alpha hydroxy acids, cocoa butter, coconut oil, jojoba oil, safflower oil, wheat germ oil, sesame oil, selachyl alc., shark oil, cerebrosides, proanthocyanidin, farnesol, candelilla, carnauba wax, vitamin E nicotinate, manganese ascorbate, zinc, oleyl alc., polysorbate 80, spermaceti, glycerol monostearate, beeswax, silicone oil, paraffin wax, ozokerite, and PEG 75 lanolin.

TT 50-21-5, biological studies 72-17-3, Sodium lactate 77-92-9, biological studies 29031-19-4, Glucosamine sulfate.

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(topical compns. containing lecithins and moisturizers for treatment skin disorders)

RN 50-21-5 HCAPLUS

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CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 72-17-3 HCAPLUS

CN Propanoic acid, 2-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:672448 HCAPLUS

DOCUMENT NUMBER: 129:280777

TITLE: Topical moisturizing composition containing

water-dispersible lecithin

INVENTOR(S): Crandall, Wilson T.

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT	NO.		KI	ND :	DATE			A.	PPLI	CATIO	ON NC	ο.	DATE			
	-	- -						-								
WO 984	2309		A	1	1998:	1001		W	0 19:	98-U	S591	0	1998	0325		
W:	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
	DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,
	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
	UA,	ŪĠ,	UΖ,	VN,	ΥU,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM	
RW	: GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,
	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,

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CM

GA, GN, ML, MR, NE, SN, TD, TG 19981020 AU 9725503 **A**1 AU 1997-25503 19970325 US 5945409 Α 19990831 US 1997-876764 19970616 AU 9867750 19981020 AU 1998-67750 A1 19980325 PRIORITY APPLN. INFO.: US 1997-876764 A 19970616 US 1995-403241 A2 19950310 WO 1997-US4985 A 19970325 WO 1998-US5910 W 19980325 Methods and compns. for topically treating and moisturizing keratinous AB structures of humans and animals including skin, hair, fingernails, toenails, hooves and horns are disclosed. The methods and compns. comprise applying to the keratinous tissue a water-dispersible lecithin. A solution of 20 g soy lecithin in 20 mL iso-Pr palmitate was mixed with 2 mL of almond oil and 80 mL of 20% Pluronic solution to obtain a gel. The moisturizing effect of the gel on the skin of volunteers was studied. 50-21-5, Lactic acid, biological studies 72-17-3, Sodium ΙT lactate 77-92-9, Citric acid, biological studies 29031-19-4, Glucosamine sulfate RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (topical moisturizing composition containing water-dispersible lecithin) 50-21-5 HCAPLUS RNPropanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME) CN OH Me-CH-CO2H RN72-17-3 HCAPLUS CNPropanoic acid, 2-hydroxy-, monosodium salt (9CI) (CA INDEX NAME) OH Me-CH-CO2H Na RN77-92-9 HCAPLUS 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME) CO2H $HO_2C-CH_2-C-CH_2-CO_2H$ OH 29031-19-4 HCAPLUS D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:184340 HCAPLUS

DOCUMENT NUMBER: 128:263984

TITLE: Photosensitive resin composition containing

carbohydrates, its cured product, and ink-jet receptor, etc. coated with the composition

INVENTOR(S): Yoshida, Kenji; Tokuda, Hiyohisa; Ishii, Kazuhiko

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 10077309 A2 19980324 JP 1996-246960 19960830
PRIORITY APPLN. INFO.: JP 1996-246960 19960830

AB The composition contains (A) ethylenically-unsatd. compound, (B) carbohydrates, preferably chitosan lactate, (C) a photoinitiator, and (D) a filler as essential components, and optionally (E) a polymer having tertiary N. Also claimed are a cured product of the composition and materials coated with the cured film, e.g. ink-jet printing paper, OHP sheet, optical disks, etc. The ink jet printing paper having an ink-receptive layer comprising the composition shows good ink drying, image stability, transferability, and anticurling property.

IT 29031-19-4, Glucosamine sulfate 66267-50-3, Chitosan lactate

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(photocurable resin composition containing chitosan (salts) for ink-jet printing

sheet)

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

RN 66267-50-3 HCAPLUS

CN Chitosan, 2-hydroxypropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 9012-76-4

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 50-21-5

CMF C3 H6 O3

L20 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:411064 HCAPLUS

DOCUMENT NUMBER: 127:85838

TITLE: Topical moisturizing composition containing lecithin

and isopropyl palmitate Crandall, Wilson Trafton

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
US 5639740	A	19970617	US 1995-403241	19950310
WO 9842348	A1	19981001	WO 1997-US4985	19970325
W: AU,	CA, JP			
RW: AT,	BE, CH, DE	, DK, ES,	FI, FR, GB, GR, IE, IT	L, LU, MC, NL, PT, SE
AU 9725503	A1	19981020	AU 1997-25503	19970325
US 5945409	A	19990831	US 1997-876764	19970616
US 6316428	B1	20011113	US 1999-383779	19990826
PRIORITY APPLN.	INFO.:		US 1995-403241 A	19950310
			WO 1997-US4985 A	19970325
			US 1997-876764 A1	19970616

- AB Topical moisturizing composition for treating keratinous structures of humans and animals including skin, hair, fingernails, toenails, hooves, and horns contain lecithin and iso-Pr palmitate. Lecithin organogel was prepared by dissolving 20 g of soy lecithin granules in 20 mL of iso-Pr palmitate. This lecithin organogel was topically applied in cream form to the skin of one hand of volunteers with a history of dry skin. The treated skin appeared smoother, softer and younger and many cracks disappeared after 10 day treatment.
- IT 50-21-5, Lactic acid, biological studies 77-92-9, Citric
 acid, biological studies 29031-19-4, Glucosamine sulfate
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(topical moisturizing composition containing lecithin and iso-Pr palmitate) RN 50-21-5 HCAPLUS

CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

RN 77-92-9 HCAPLUS

CN 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

L20 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:147938 HCAPLUS

DOCUMENT NUMBER:

120:147938

TITLE:

Second-order nonlinear optical properties of

saccharide materials

AUTHOR(S):

Bourhill, Grant; Mansour, Kamjou; Perry, Kelly J.;

Khundkar, Lutfur; Sleva, Edward T.; Kern, Roger; Perry, Joseph W.; Williams, Ian D.; Kurtz, Stewart K.

CORPORATE SOURCE:

Jet Propul. Lab., California Inst. Technol., Pasadena,

CA, 91109, USA

SOURCE:

Proceedings of SPIE-The International Society for

Optical Engineering (1993), 1853 (Organic and

Biological Optoelectronics), 110-25

CODEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Saccharide materials are potential candidates for frequency conversion applications. In addition to being chiral, which ensures crystallization in a space

group relevant for 3-wave mixing processes, they generally possess useful phys. and optical properties. The powder 2nd-harmonic generation efficiencies of both saturated saccharides and sugars with simple polar π -functionalities were examined Powder efficiencies of ≤ 5 times that of sucrose were observed for simple saturated sugars, whereas values of 18 + sucrose (or 0.45 + urea) were observed for unsatd. saccharide derivs. For both classes of material, there is a tendency for more

efficient nonlinear compds. to reside in a monoclinic rather than an orthorhombic space group. There apparently is a correlation between the phase-matching potential and the crystal symmetry.

IT 299-27-4, Potassium D-Gluconate 527-07-1, Sodium

D-Gluconate 29031-19-4, D-Glucosamine Sulfate

RL: PRP (Properties)

(nonlinear optical property of, second-harmonic generation)

RN 299-27-4 HCAPLUS

CN D-Gluconic acid, monopotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

K

RN 527-07-1 HCAPLUS

CN D-Gluconic acid, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9

CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

13

Absolute stereochemistry. Rotation (+).

L20 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:591301 HCAPLUS

DOCUMENT NUMBER: 119:191301

TITLE: Powder second harmonic generation efficiencies of

saccharide materials

AUTHOR(S): Bourhill, Grant; Mansour, Kamjou; Perry, Kelly J.;

Khundkar, Lutfur; Sleva, Edward T.; Kern, Roger;

Perry, Joseph W.; Williams, Ian D.; Kurtz, Stewart K.

CORPORATE SOURCE: Jet Propul. Lab., California Inst. Technol., Pasadena,

CA, 91109, USA

SOURCE: Chemistry of Materials (1993), 5(6), 802-8

CODEN: CMATEX; ISSN: 0897-4756

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Saccharide materials are potential candidates for frequency conversion applications. In addition to being chiral, which ensures crystallization in a space

group necessary for three-wave mixing processes, they generally possess useful phys. and optical properties. The authors examined the powder second harmonic generation efficiencies of both saturated saccharides and sugars with simple polar $\pi\text{-functionalities}$. Powder efficiencies of up to 5 times that of sucrose were observed for simple saturated sugars, whereas values of 18 times sucrose (or 0.45 + urea) were observed for unsatd. saccharide derivs. The authors noted that for both classes of material, there is a tendency for more efficient nonlinear compds. to reside in a monoclinic rather than an orthorhombic space group. The authors also noted that there appears to be a correlation between the phase-matching potential and the crystal symmetry. In addition, two promising saccharide materials have been identified for frequency conversion applications, based on their powder second-harmonic generation efficiencies, their phase-matching capabilities, and their UV transparency.

IT 299-27-4, Potassium D-gluconate 527-07-1, Sodium D-gluconate 29031-19-4, D-Glucosamine sulfate

RL: USES (Uses)

(powder second harmonic generation efficiency of)

RN 299-27-4 HCAPLUS

CN D-Gluconic acid, monopotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

1

● K

RN 527-07-1 HCAPLUS

CN D-Gluconic acid, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Na

RN 29031-19-4 HCAPLUS

CN D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CMF H2 04 S

CM 2

CRN 3416-24-8

CMF C6 H13 N O5

Absolute stereochemistry. Rotation (+).

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